

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.**

Application Serial Number: 101694,243  
Source: JEW  
Date Processed by STIC: 10-17-84

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IFWO

**RAW SEQUENCE LISTING**  
**PATENT APPLICATION: US/10/694,243**

**DATE: 11/17/2004**  
**TIME: 16:12:57**

**Input Set : A:\17625058.app**  
**Output Set: N:\CRF4\11172004\J694243.raw**

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3 <110> APPLICANT: BAO, GANG
4     NIE, SHUMING
5     NITIN, NITIN
6     LACONTE, LESLIE
8 <120> TITLE OF INVENTION: MULTIFUNCTIONAL MAGNETIC NANOPARTICLE PROBES FOR
9     INTRACELLULAR MOLECULAR IMAGING AND MONITORING
11 <130> FILE REFERENCE: 17625-0058
13 <140> CURRENT APPLICATION NUMBER: 10/694,243
14 <141> CURRENT FILING DATE: 2003-10-27
16 <150> PRIOR APPLICATION NUMBER: 60/421,361
17 <151> PRIOR FILING DATE: 2002-10-25
19 <160> NUMBER OF SEQ ID NOS: 32
21 <170> SOFTWARE: PatentIn Ver. 3.2
23 <210> SEQ ID NO: 1
24 <211> LENGTH: 11
25 <212> TYPE: PRT
26 <213> ORGANISM: Artificial Sequence
28 <220> FEATURE:
29 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
30     peptide
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34     1           5           10
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38 <211> LENGTH: 34
39 <212> TYPE: PRT
40 <213> ORGANISM: Artificial Sequence
42 <220> FEATURE:
43 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
44     peptide
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48     1           5           10          15
50 Glu Arg Pro Arg Ala Pro Ala Arg Ser Ala Ser Arg Pro Arg Arg Pro
51     20          25          30
53 Val Glu
57 <210> SEQ ID NO: 3
58 <211> LENGTH: 16
59 <212> TYPE: PRT
60 <213> ORGANISM: Artificial Sequence
62 <220> FEATURE:
63 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
64     peptide

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66 <400> SEQUENCE: 3  
67 Arg Gln Ile Lys Ile Trp Phe Gln Asn Arg Arg Met Lys Trp Lys Lys  
68 1 5 10 15  
71 <210> SEQ ID NO: 4  
72 <211> LENGTH: 16  
73 <212> TYPE: PRT  
74 <213> ORGANISM: Artificial Sequence  
76 <220> FEATURE:  
77 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
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80 <400> SEQUENCE: 4  
81 Arg Arg Trp Arg Arg Trp Trp Arg Arg Trp Trp Arg Arg Trp Arg Arg  
82 1 5 10 15  
85 <210> SEQ ID NO: 5  
86 <211> LENGTH: 12  
87 <212> TYPE: PRT  
88 <213> ORGANISM: Artificial Sequence  
90 <220> FEATURE:  
91 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
peptide  
94 <400> SEQUENCE: 5  
95 Thr Pro Pro Lys Lys Lys Arg Lys Val Glu Asp Pro  
96 1 5 10  
99 <210> SEQ ID NO: 6  
100 <211> LENGTH: 20  
101 <212> TYPE: PRT  
102 <213> ORGANISM: Artificial Sequence  
104 <220> FEATURE:  
105 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
peptide  
108 <400> SEQUENCE: 6  
109 Cys Trp Lys  
110 1 5 10 15  
112 Lys Lys Lys Lys  
113 20  
116 <210> SEQ ID NO: 7  
117 <211> LENGTH: 40  
118 <212> TYPE: PRT  
119 <213> ORGANISM: Artificial Sequence  
121 <220> FEATURE:  
122 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
peptide  
125 <400> SEQUENCE: 7  
126 Lys  
127 1 5 10 15  
129 Lys Lys Trp Cys Cys Trp Lys  
130 20 25 30  
132 Lys Lys Lys Lys Lys Lys Lys  
133 35 40

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136 <210> SEQ ID NO: 8  
137 <211> LENGTH: 27  
138 <212> TYPE: PRT  
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141 <220> FEATURE:  
142 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
143 peptide  
145 <400> SEQUENCE: 8  
146 Gly Trp Thr Leu Asn Ser Ala Gly Tyr Leu Leu Gly Lys Ile Asn Leu  
147 1 5 10 15  
149 Lys Ala Leu Ala Ala Leu Ala Lys Lys Ile Leu  
150 20 25  
153 <210> SEQ ID NO: 9  
154 <211> LENGTH: 13  
155 <212> TYPE: PRT  
156 <213> ORGANISM: Artificial Sequence  
158 <220> FEATURE:  
159 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
160 peptide  
162 <400> SEQUENCE: 9  
163 Gly Leu Phe Glu Ala Leu Glu Glu Leu Trp Glu Ala Lys  
164 1 5 10  
167 <210> SEQ ID NO: 10  
168 <211> LENGTH: 46  
169 <212> TYPE: PRT  
170 <213> ORGANISM: Artificial Sequence  
172 <220> FEATURE:  
173 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
174 peptide  
176 <400> SEQUENCE: 10  
177 Lys  
178 1 5 10 15  
180 Gly Gly Cys Arg Gly Asp Met Phe Gly Cys Ala Lys Lys Lys Lys Lys  
181 20 25 30  
183 Lys Arg Gly Asp  
184 35 40 45  
187 <210> SEQ ID NO: 11  
188 <211> LENGTH: 25  
189 <212> TYPE: PRT  
190 <213> ORGANISM: Artificial Sequence  
192 <220> FEATURE:  
193 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
194 peptide  
196 <400> SEQUENCE: 11  
197 Lys  
198 1 5 10 15  
200 Gly Gly Cys Met Phe Gly Cys Gly Gly  
201 20 25  
204 <210> SEQ ID NO: 12

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Input Set : A:\17625058.app  
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205 <211> LENGTH: 31  
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209 <220> FEATURE:  
210 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
211 peptide  
213 <400> SEQUENCE: 12  
214 Lys  
215 1 5 10 15  
217 Ile Cys Arg Arg Ala Arg Gly Asp Asn Pro Asp Asp Arg Cys Thr  
218 20 25 30  
221 <210> SEQ ID NO: 13  
222 <211> LENGTH: 20  
223 <212> TYPE: PRT  
224 <213> ORGANISM: Artificial Sequence  
226 <220> FEATURE:  
227 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
228 peptide  
230 <220> FEATURE:  
231 <221> NAME/KEY: MOD\_RES  
232 <222> LOCATION: (17)  
233 <223> OTHER INFORMATION: Beta-Ala  
235 <220> FEATURE:  
236 <221> NAME/KEY: MOD\_RES  
237 <222> LOCATION: (19)  
238 <223> OTHER INFORMATION: Lys coupled to biotin (D-biotinyl)  
240 <220> FEATURE:  
241 <221> NAME/KEY: MOD\_RES  
242 <222> LOCATION: (20)  
243 <223> OTHER INFORMATION: Beta-Ala  
245 <400> SEQUENCE: 13  
246 Lys Lys Trp Lys Met Arg Arg Asn Gln Phe Trp Val Lys Val Gln Arg  
247 1 5 10 15  
W--> 249 Ala Lys Xaa Ala  
250 20  
253 <210> SEQ ID NO: 14  
254 <211> LENGTH: 30  
255 <212> TYPE: PRT  
256 <213> ORGANISM: Artificial Sequence  
258 <220> FEATURE:  
259 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
260 peptide  
262 <400> SEQUENCE: 14  
263 Val Ala Tyr Ile Ser Arg Gly Gly Val Ser Thr Tyr Tyr Ser Asp Thr  
264 1 5 10 15  
266 Val Lys Gly Arg Phe Thr Arg Gln Lys Tyr Asn Lys Arg Ala  
267 20 25 30  
270 <210> SEQ ID NO: 15  
271 <211> LENGTH: 32

## RAW SEQUENCE LISTING

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Input Set : A:\17625058.app  
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272 <212> TYPE: PRT  
273 <213> ORGANISM: Artificial Sequence  
275 <220> FEATURE:  
276 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
277 peptide  
279 <400> SEQUENCE: 15  
280 Ile Gly Arg Ile Asp Pro Ala Asn Gly Lys Thr Lys Tyr Ala Pro Lys  
281 1 5 10 15  
283 Phe Gln Asp Lys Ala Thr Arg Ser Asn Tyr Tyr Gly Asn Ser Pro Ser  
284 20 25 30  
290 <210> SEQ ID NO: 16  
291 <211> LENGTH: 12  
292 <212> TYPE: PRT  
293 <213> ORGANISM: Artificial Sequence  
295 <220> FEATURE:  
296 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
297 peptide  
299 <400> SEQUENCE: 16  
300 Pro Leu Ala Glu Ile Asp Gly Ile Glu Leu Thr Tyr  
301 1 5 10  
304 <210> SEQ ID NO: 17  
305 <211> LENGTH: 30  
306 <212> TYPE: PRT  
307 <213> ORGANISM: Artificial Sequence  
309 <220> FEATURE:  
310 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
311 peptide  
313 <400> SEQUENCE: 17  
314 Lys  
315 1 5 10 15  
317 Gly Gly Pro Leu Ala Glu Ile Asp Gly Ile Glu Leu Gly Ala  
318 20 25 30  
321 <210> SEQ ID NO: 18  
322 <211> LENGTH: 30  
323 <212> TYPE: PRT  
324 <213> ORGANISM: Artificial Sequence  
326 <220> FEATURE:  
327 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
328 peptide  
330 <400> SEQUENCE: 18  
331 Lys  
332 1 5 10 15  
334 Gly Gly Pro Leu Ala Glu Ile Asp Gly Ile Glu Leu Cys Ala  
335 20 25 30  
338 <210> SEQ ID NO: 19  
339 <211> LENGTH: 28  
340 <212> TYPE: PRT  
341 <213> ORGANISM: Artificial Sequence  
343 <220> FEATURE:

RAW SEQUENCE LISTING ERROR SUMMARY                   DATE: 11/17/2004  
PATENT APPLICATION: US/10/694,243               TIME: 16:12:58

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:13; Xaa Pos. 19 ✓

**VERIFICATION SUMMARY**

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Input Set : A:\17625058.app

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L:249 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:16